

Fig. 1

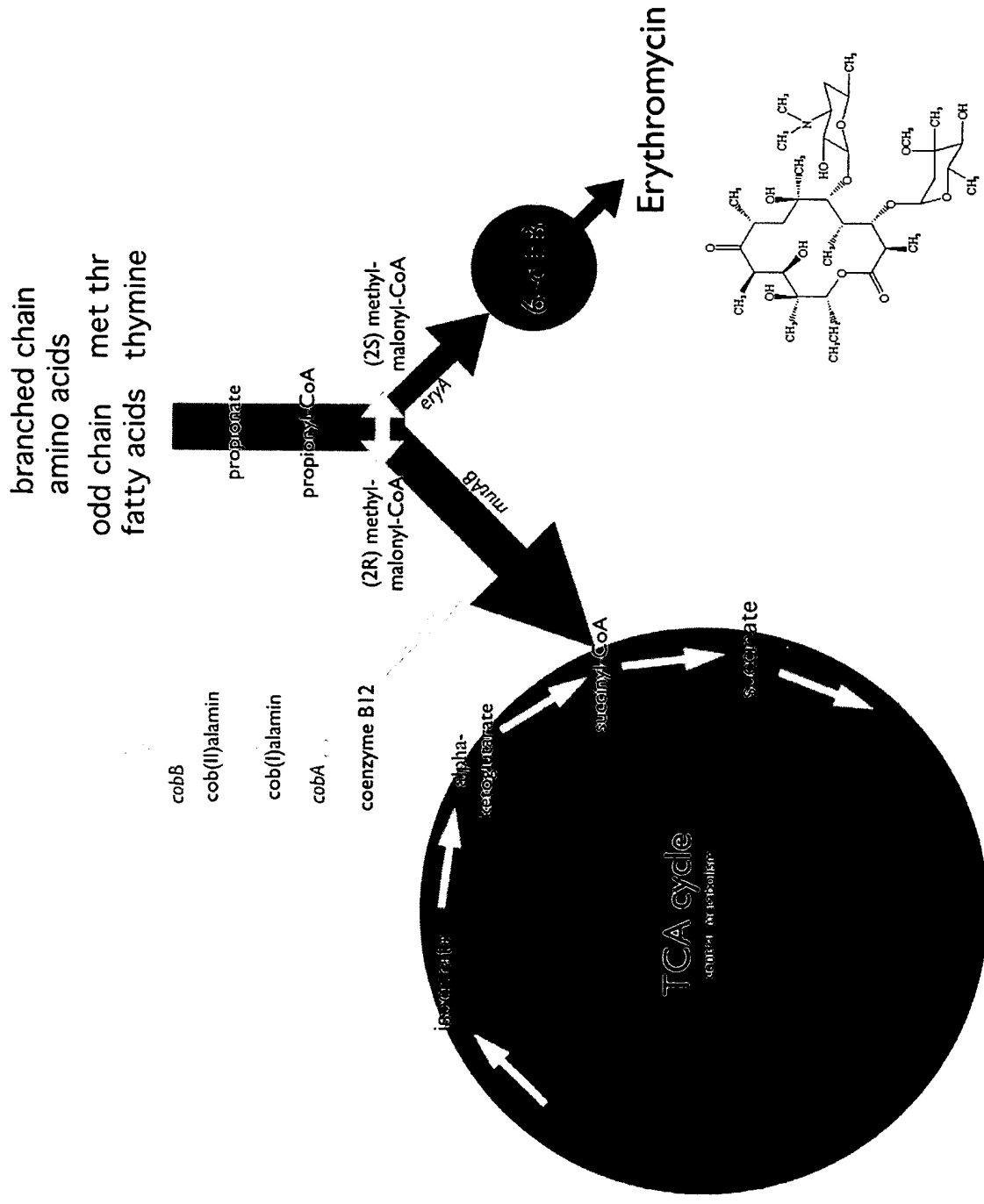


Fig. 2 patent: *MutB* partial sequence with insertion site bolded (the actual insertion of the transposon was between the two bolded nucleotides)

GCGGTCGACGGCGCCGAGCCGTGGGACGCCCCGAGGGCATCGCGGTCAAGAACCT
CTACACCGCCGACGACCTCGCCGACGTCGACGCGCTCGACACCTACCCGGGCCTCGC
GCCGTTCTGCGCGGTCCCTACCCGGCCATGTACACGACCCAGCCGTGGACGATCCG
CCAGTACGCCGGGTTCTCGACCGCCGAGGAGTCGAACGCGTTCTACCGCCGCAACCT
CGCCGCCGGCCAAAAGGGCCTCTCGGTGCGCTTCGACCTCGCGACGCACCGCGGCT
ACGACTCCGACCACCCGCGCGTGAAGGGCGACGTCGGCATGGCCGGCGTCGCGATC
GACTCGATCTACGACGCCCCGCCAGCTCTTCGACGGCATCCCGCTCGACGAGATGAGC
GTCTCGATGACCATGAACGGCGCGGTGCTCCCGGTGCTCGCGCTCTACATCGTGGCG
GCCGAGGAGCAGGGGGTGACGCCGAGCAGCTCTCGGGGACCATCCAGAACGACA
TCCTCAAGGAGTTCATGGTCCGCAACACCTACATCTACCCGCCGGCGCCGTCGATGC
GGATCATCTCCGACATCTTCGCGTACACGGCGGCGAAGATGCCGCGGTTCAACTCCA
TCTCCATCTCCGGGTACCACATCCAAGAGGGCCGGGGCGACGAACGACCTCGAGCTC
GCCTACACGCTCGCCGACGGTGTGGAGTACATCCGCGCCGGGCTCGACGTCGGCCTC
GACATCGACGCGTTCGCGCCGCGGCTCAGCTTCTTCTGGGCCATCGGCATGAACTTC
TACATGGAGATCGCGAAGATGCGCGCCGCCCGTGCCCTGWGGGCCCGGCTCGTGCG
CGACTTCGACCCGAAGAACCCCAAGAGCC**TC**AGCCTGCGCACGCACAGCCAGACA
TCGGGCTGGAGCCTCACCGCGCAGGACGTGTTCAACAACGTCCAGCGCACCTGCAT
CGAGGCGATGGCCGCCACGCAGGGCCACACCCAGAGCCTGCACACGAACGCGCTCG
ACGAGGCGATCGCGCTGCCGACGGACTTCAGCGCGCGGATCGCCCGCAACACGCAG
CTGCTGCTGCAGCAGGAGTCGGGCACCAACGGCGTCATCGACCCGTGGGGCGGCTC
CTACTACGTCGAGAAGCTGACGCACGACCTCGCGAACC GCGCCTGGGGCGCACATCC
AGGAGGTCGAGAAGGCCGGCGGCATGGCCAAGGCCATCGAGGCGGGCATCCCCAA
GATGCGCGTCGAGGAGGCGGCCGCCCGCACGCAGGCACGCATCGACTCCGGCCAGC
AGGCCGTATCGGCGTCAACACCTACCGCCTCGCCGACGAGGACCCGCTCGACGTG
CTCAAGGTCGACAACGCGTCGGTCTACGCCCAGCAGGTGGCGAAGCTCGAGCGACT
GCGCGCCGAGCGCGACCCGCAGGAGGTCGAGCGCGCGCTCGACGCCCTGACGGCCA
GCGCCGAGCGTGGCGCCAGCCGCGACGGCTCGCTCGACGGCAACCTGCTCGCCCTG
GCCGTCGACGCGGCCCGCGCGAAGGCGACGGTCGGCGAGATCTCCTACGCGCTCGA
GAAGGTCTACGGGCGCCACCAGGCCGTCATCCGTACGATCTCCGGTGTGTACCGGA
CCGAGGCGGGCCAGGGCGGCAACGTCCAGAAGGTCATCGACGCCACCGAGGCGTTC
GAGAAGGCCGAGGGTCGACGCCCCGCGCATCCTCGTGGCCAAGATGGGGCAGGACGG
CCACGACCGCGGCCAGAAGGTCATCGTCACGGCGTTCGCCGACATGGGCTTCGACG
TCGACGTCGGACCGCTGTTCTCCACGCCCCGAGGAGGTCGCGCAGCAGGCCGTGGAC
GCCGACGTGCACATCGTCGGCGTCTCGAGCCTCGCGGCGGGCCACCTGACGCTCCTG
CCGGAGCTGAAGAAGGCGTTGGCCGAGCTCGGCGGCGAGGACGTCATGGTTCGTCAT
GGGTGGCGTCATCCCGCCCCGACGACGTGCCGACGCTGAAGGAGATGGGCGCTGCCG
AGGTGTTCTGCCCCGGCACGGTCATCGCCGACTCCGCGCTCAGCCTGCTCGAGCGGT
CCGCGCGAGCCTGCAGCACTAGATGGTTCGGTTCGTCCGAGGTAA

Fig. 3 patent: Transposon sequence 3,764 bp.

CTGTCTCTTATACACATCTCAACCATCATCGATGAATTCCACCCTGTGAATGCGCAA
ACCAACCCTTGGCAGAACATATCCATCGCGTCCGCCATCTCCAGCAGCCGCACGCGG
CGCATCTCGGGCAGCGTTGGGTCCTGGCCACGGGTGCGCATGATCGTGCTCCTGTGCG
TTGAGGACCCGGCTAGGCTGGCGGGGTTGCCTTACTGGTTAGCAGAATGAATCACCG
ATACGCGAGCGAACGTGAAGCGACTGCTGCTGCAAAACGTCTGCGACCTGAGCAAC
AACATGAATGGTCTTTCGGTTTCCGTGTTTCGTAAAGTCTGGAAACGCGGAAGTCAGC
GCCCTGCACCATTATGTTCCGGATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAAT
GGCAGATCCCTGGCTTGTTGTCCACAACCGTTAAACCTTAAAAGCTTTAAAAGCCTT
ATATATTCTTTTTTTTCTTATAAACTTAAAACCTTAGAGGCTATTTAAGTTGCTGAT
TTATATTAATTTTATTGTTCAAACATGAGAGCTTAGTACGTGAAACATGAGAGCTTA
GTACGTTAGCCATGAGAGCTTAGTACGTTAGCCATGAGGGTTTAGTTTCGTTAAACAT
GAGAGCTTAGTACGTTAAACATGAGAGCTTAGTACGTGAAACATGAGAGCTTAGTA
CGTACTATCAACAGGTTGAACTGCTGATCTTCGGATCTATGTCGGGTGCGGAGAAAG
AGGTAATGAAATGGCATCCGGATCTGCATCGCAGGATGCTGCTGGCTACCCTGTGGA
ACACCTACATCTGTATTAACGAAGCAATTCGAATTCACAGAGGCGCTTATCGGTTGG
CCGCGAGATTCTGTGCGATCCTCTCGTGCAGCGCGATTCCGAGGGAAACGGAAACG
TTGAGAGACTCGGTCTGGCTCATCATGGGGATGGAAACCGAGGCGGAAGACGCCTC
CTCGAACAGGTCGGAAGGCCACCCCTTTTCGCTGCCGAACAGCAAGGCCAGCCGAT
CCGGATTGTCCCCGAGTTCCTTCACGGAAATGTCGCCATCCGCCTTGAGCGTCATCA
GCTGCATACCGCTGTCCCGAATGAAGGCGATGGCCTCCTCGCGACCGGAGAGAACG
ACGGGAAGGGAGAAGACGTAACCTCGGCTGGCCCTTTGGAGACGCCGGTCCGCGAT
GCTGGTGATGTCACTGTCGACCAGGATGATCCCCGACGCTCCGAGCGCGAGCGACG
TGCGTACTATCGCGCCGATGTTCCCGACGATCTTCACCCCGTCGAGAACGACGACGT
CCCCACGCCGGCTCGCGATATCGCCGAACCTGGCCGGGCGAGGGACGCGGGCGATG
CCGAATGTCTTGGCCTTCCGCTCCCCCTTGAACAACCTGGTTGACGATCGAGGAGTCG
ATGAGGCGGACCGGTATGTTCTGCCGCCCGCACAGATCCAGCAACTCAGATGGAAA
AGGACTGCTGTCGCTGCCGTAGACCTCGATGAACTCCACCCCGGCCGCGATGCTGTG
CATGAGGGGCTCGACGTCCTCGATCAACGTTGTCTTTATGTTGGATCGCGACGGCTT
GGTGACATCGATGATCCGCTGCACCGCGGGATCGGACGGATTTGCGATGGTGTCCA
ACTCAGTCATGGTCGTCTACCGGCTGCTGTGTTTCAGTGACGCGATTCTGGGGTGT
GACACCCTACGCGACGATGGCGGATGGCTGCCCTGACCGGCAATACCAACGCAAG
GGGAAGTCGTCGCTCTCTGGCAAAGCTCCCCGCTCTTCCCCGTCCGGGACCCGCGCG
GTCGATCCCCGCATATGAAGTATTCGCCTTGATCAGATCAGGTACCCGGGGATCATC
TTATTAATCAGATAAAATATTTCTAGATTTTCAGTGCAATTTATCTCTTCAAATGTAGC
ACCTGAAGTCAGCCCCATACGATATAAGTTGTAATTCTCATGTTTGACAGCTTATCA
TCGATAAGCTTTAATGCGGTAGTTTATCACAGTTAAATTGCTAACGCAGTCAGGCAC
CGTGTATGAAATCTAACAATGCGCTCATCGTCATCCTCGGCACCGTCACCCTGGATG
CTGTAGGCATAGGCTTGGTTATGCCGGTACTGCCGGGCTCTTGCGGGATATCGTCC
ATTCCGACAGCATCGCCAGTCACTATGGCGTGCTGCTAGCGCTATATGCGTTGATGC
AATTTCTATGCGCACCCGTTCTCGGAGCACTGTCCGACCGCTTTGGCCGCCGCCAG
TCCTGCTCGCTTCGCTACTTGGAGCCACTATCGACTACGCGATCATGGCGACCACAC
CCGTCCTGTGGATCCTCTACGCCGGACGCATCGTGGCCGGCATCACCGGCGCCACAG
GTGCGGTTGCTGGCGCCTATATCGCCGACATCACCGATGGGGAAGATCGGGCTCGC
CACTTCGGGCTCATGAGCGCTTGTTTCGGCGTGGGTATGGTGGCAGGCCCCCGTGGCC

Fig. 3 cont'd

GGGGGACTGTTGGGCGCCATCTCCTTG CATGCACCATTCCCTTGCGGCGGCGGTGCTC
AACGGCCTCAACCTACTACTGGGCTGCTTCCTAATGCAGGAGTCGCATAAGGGAGA
GCGTCGACCGATGCCCTTGAGAGCCTTCAACCCAGTCAGCTCCTTCCGGTGGGCGCG
GGGCATGACTATCGTCGCCGCACTTATGACTGTCTTCTTTATCATGCAACTCGTAGG
ACAGGTGCCGGCAGCGCTCTGGGTCA TTTTCGGCGAGGACCGCTTTCGCTGGAGCGC
GACGATGATCGGCCTGTCGCTTGCGGTATTCGGAATCTTGACGCCCTCGCTCAAGC
CTTCGTCACTGGTCCCGCCACCAAACGTTTCGGCGAGAAGCAGGCCATTATCGCCGG
CATGGCGGCCGACGCGCTGGGCTACGTCTTGCTGGCGTTCGCGACGCGAGGCTGGA
TGGCCTTCCCCATTATGATTCTTCTCGCTTCCGGCGGCATCGGGATGCCCGCGTTGCA
GGCCATGCTGTCCAGGCAGGTAGATGACGACCATCAGGGACAGCTTCAAGGATCGC
TCGCGGCTCTTACCAGCCTAACTTCGATCATTGGACCGCTGATCGTCACGGCGATTT
ATGCCGCCTCGGCGAGCACATGGAACGGGTGGCATGGATTGTAGGCGCCGCCCTA
TACCTTGTCTGCCTCCCCGCGTTGCGTCGCGGTGCATGGAGCCGGGGCCACCTCGACC
TGAATGGAAGCCGGCGGCACCTCGCTAACGGATTCA CCACTCCAAGAATTGGAGCC
AATCAATTCTTGCGGAGAACTGTGAATGCGCAAACCAACCCTTGGCAGAACATATCC
ATCGCGTCCGCCATCTCCAGCAGCGCACGCGGCGCATCTCGGGCACGTTGGGTCCTG
GAATTCGAGCTCGGTACCAGCCCCAGCCGAGCACGCGCCGGCACGCCTGGTAGATG
TCGGACCGGAGTTCGAGGTACGCGGCTTG CAGGTCCAGGAAGGGGACGTCCATGCG
AGTGTCCGTTTCGAGTGGCGGCTTGCGCCCGATGCTAGTCGCCGTTGATCGGCGATCG
CAGGTGCACGCGGTGATCTTGACGGCTGGCGAGAGGTGCGGGAGGATCTGACCGA
CCCGGTCCACACGTGGCACCGCGATGCTGTTGTGGGCTGGACAATCGTGCCGGTTGG
TAGGATCCTCTAGAGTCGACGCATGCAAGCTTCTGCAGGCATGCAAGCTTCAGGGTT
GAGATGTGTATAAGAGACAG

Fig. 4: cobA DNA sequence with insertion site bolded (the actual insertion of the transposon was between the two bolded nucleotides)

ATGCCCCAGGGCCAGCCGCTGGTCGTCCCCGACGACGGCCTCACCACCCGCCAGCG
TCGCAACCGTCCGCTCGTCATGGTCCACACCGGGCCCGGCAAGGGGAAGTCGACCG
CCGCGTTCGGCCTCGCCATGCGCGCCTGGAACCAGGGCTGGAAGGTCGGCGTGTTCC
AGTTCGTGAAGTCCGCCAAGTGGCGCGTCGGCGAGCAGAGCGTGCTCGAGCACCTG
GGCCGCCTGCAC**G**AGACCGAGGGCCTCGGCGGGCCCGTCGAGTGGCACAAGATGG
GCTCGGGCTGGTCGTGGTCGCGCAAGTCGGGCACCGACGACGACCACGCCGTCGCC
GCCGCCGAGGGCTGGGCCGAGATCAAGCGTCGCCTCGCCACCGAGACGCACGACCT
CTACGTGCTCGACGAGTTCACCTACCCGATGAAGTGGGGCTGGGTGACGTCGACG
ACGTCGCCGACACGCTCGCGTCGCGCCCCGGCCGCCAGCACGTGGTGATCACCGGC
CGCGACGCCGCCCCCGGCTCCTGGAGGTCGCCGACCTCGTCACCGAGATGACGAA
GGTCAAGCACCCCATGGACGTCGGCCAGAAGGGTCAGCGAGGCATCGAGTGGTGA.